invention and the applied art of record unconvincing. The Examiner then merely repeated the art rejections indicated in the previous Office Action with slight modification to fit the amended/new claim language of claims 1, 11-14 and 16. Applicants once again respectfully traverse all of the Examiner's art rejections.

The 35 U.S.C. 103(a) rejection of independent claims 1, 11-13, 16 as well as claims 2-5, 9-10, 14-15 depending therefrom as being unpatentable over Culbert in view of Sumimoto is traversed because (i) there is no suggestion or motivation to combine teachings of Culbert and Sumimoto, and (ii) the references, singly or in combination, fail to teach or disclose all limitations of the rejected claims.

Regarding (i), the Examiner stated that Culbert discloses a method for allocating resources on a computer. The Examiner further noted that Sumimoto discloses a system for managing resource allocation for processes distributed across a network or multiple computers. The Examiner then alleged that it would have been obvious "to use the resource allocation scheme taught by Culbert for processes and resources distributed throughout a network, as taught by Sumimoto, so that the most important network distributed processes can be assured available resources". _See_ page 3, third paragraph of the Final Office Action. This is not an adequate suggestion or motivation to modify or combine the references.

First, it appears that the statement "the most important network distributed processes can be assured available resources" serves as the Examiner's suggestion or motivation to modify or combine the references. It is, however, not clear from the language of the Final Office Action as to where the so-called suggestion or motivation might be found.

The rule is "there must be some suggestion or motivation, either **in the references themselves** or **in the knowledge generally available** to one of ordinary skill in the art, to modify the reference or to combine reference teachings. _See_ MPEP 2143.

Applicants have carefully reviewed the applied references and still failed to locate any teachings in the references which the Examiner alleges provide "suggestion or motivation to modify/combine". Applicants further respectfully submit that the Examiner's "suggestion or motivation to modify/combine" is *not* available in the general knowledge of a person of ordinary skill in the art at the time the present invention was made. Should the Examiner insist otherwise, convincing evidence showing that the "suggestion or motivation to modify/combine" is actually in the knowledge generally available to one of ordinary skill in the art **at the time the present invention was made** is respectfully requested.

Second, it is not clear *how* the Examiner proposed to combine or modify the references. As best understood, it was the Examiner's intention to suggest modifying the Culbert single-computer-system resource-allocation scheme for use in a distributed network environment given the teaching of Sumimoto that computing resources might be allocated among network nodes. This follows logically from the Examiner's discussion in page 7, last paragraph of the Final Office Action. However, in this case, there is still needed a suggestion or motivation that a single-computer-system resource-allocation scheme, such as the one taught by Culbert, is **modifiable or adaptable** to distributed network environments. Such a suggestion or motivation was missing from the Examiner's discussion. This was pointed out in the paragraph bridging pages 5 and 6 of the July 18, 2001 Amendment.

It is noted on page 7 of the Final Office Action that the Examiner stated resource allocation among processes within a single computer system **performs the same function** as resource allocation among processes within a distributed network in that both systems attempt to allocate optimal resources to processes that must be processed. Assuming *arguendo* that the Examiner's statement is true, it is not clear how the statement might be tied to the discussion as to if Culbert and Sumimoto are properly combinable. It should be noted that one of two systems which may perform the same function in different environments is not necessarily modifiable or adaptable to

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properly work in the other's environment. For example, both a car and a boat perform the same function of transportation, in different environments, but they are not deemed to be modifiable or adaptable properly work in the other's environment. Thus, the Examiner's statement that a single-computer-system resource-allocation scheme and a distributed-network resource-allocation scheme may perform the same function does *not* necessarily mean that the single-computer-system resource-allocation scheme may be adapted to work in a distributed network environment.

For any of the above reasons, it is respectfully submitted that the Final Office Action did not specify an adequate suggestion or motivation to combine Culbert and Sumimoto.

Regarding (ii), even assuming arguendo that the references might be combined in the manner suggested by the Examiner, the combined method would still fail to teach or disclose the limitation of **guaranteeing** the minimum resource allocation for the first process **should insufficient network resources be available.** See independent claims 1, 11-13 and 16. The present invention relates to situations when network resources are in sufficient, and thus, re-allocation of network resources will be required. If this is the case, the minimum resource allocation for the first (high-priority) process must be guaranteed. See also the last paragraph of independent claim 165. In contrast, Culbert relates to optimization of global system performance where a request for additional resources **could be denied** to maintain global optimization of the whole computer system. See col. 11 lines 51-52 of Culbert. Thus, if an amount of computer resources allocated to a high-priority process for any reason, e.g. because of failure, drops below a minimum level, a request for additional resources to fulfil the insufficient amount could still be denied. In the Culbert management system, the minimum requirement of computer resources for the high-priority process to run properly is not guaranteed.

The Examiner did not agree with Applicants' reading of the Culbert reference. More particularly, the Examiner noted that Culbert teaches optimizing the system performance while still providing the needed resources, and concluded that a minimum resource allocation is guaranteed.

The Examiner seemed to take the above teaching, found in col. 9 lines 47-54, out of context of the Culbert reference. When read in light of the whole description of the Culbert method in col. 9 lines 24-54, the relevant teaching relied upon by the Examiner means that minimum resource allocation is guaranteed only for those processes which are not affected at the beginning of the degradation. For processes which have lost resources due to and at the beginning of the degradation, and requested that additional resources be assigned thereto, their request for additional resource might still be denied. If resources originally allocated for a high priority process in the Culbert system, for any reason, dropped below a minimum level, and the high-priority process's request for additional resource is denied, as it could be the case, then how the minimum resource allocation is guaranteed for the resource-loss-suffering high-priority process?

It is clear that the Culbert resource management system does not guarantee minimum resource allocation in the manner claimed in independent claims 1, 11-13 and 16. The missing element is neither supplied by other applied and/or cited references of record.

Accordingly, Applicants respectfully submit that the pending claims are patentable over the applied art of record.

Of particular note, claims 14 and 16 require that the redistributing step be performed by removing an amount of computer resources previously assigned to the second (low-priority) process, and reallocating the removed amount of computer resources to the first (high-priority) process **irrespective of computer resources necessary for the second process to run on the computer network.** The Examiner agreed that Culbert is not done wholly irrespective of an amount of computer resources necessary for the second (low-priority) process to run on the computer network. The Examiner, however, stated that doing so is a mere design choice. Applicants respectfully traverse the Examiner's design choice argument, and request that citation of a particular reference or references which might support the Examiner's assertion be provided, or the design choice argument be withdrawn.

Furthermore, it is impermissible to modify the Culbert system, i.e. to reallocate resources wholly irrespective of an amount of computer resources necessary for low-priority processes to run on the computer network, in a manner that runs counter to the requirements of the Culbert system itself. As noted by the Examiner, Culbert, in col. 9 lines 47-54, specifies that a resource manager seeks a global optimal configuration **while still providing the needed resources** i.e. guaranteeing minimum resource allocation for processes which do not request additional resources during the degradation. The maximum amount of resources removable from these processes should not be too large so that these **processes are left with enough (minimum) resources to run properly** (although, perhaps, not optimally). *See* col. 11 lines 12-14 of Culbert. Thus, minimum resources needed for each of the processes in the Culbert system **should be taken into account and cannot be disregarded** during optimization. Modifying Culbert to reallocate resources to high-priority processes irrespective of computer resources necessary for low-priority processes to run on the computer network would change the above principle of operation of the prior art invention being modified, i.e. Culbert, and hence is impermissible. *See* MPEP 2143.01.

For any of the above reasons, claims 14 and 16 are clearly patentable over the applied art of record.

Each of the Examiner's rejections has been traversed. Applicants respectfully submit that all claims pending in the present application are now in condition for allowance. Early and favorable indication of allowance though an Advisory Action is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

Respectfully submitted,

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